

Appln. No. 10/622,748
Amdt. dated: February 9, 2007
Reply to Office Action dated: Nov. 15, 2006

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for accurately measuring hearing loss, comprising the steps of:
selecting a series of audio tones within the normal range of hearing;
measuring a relative sensitivity of a test subject with respect to the ability to hear each of said audio tones, exclusive of the effects of tinnitus.
2. (Original) The method according to claim 1 further comprising the step of determining for each tone an intensity necessary for said test subject to hear said tones at a subjectively equal loudness level.
3. (Original) The method according to claim 2 further comprising the step of selecting said intensity of said subjectively equal loudness level to exceed a level of noise attributable to tinnitus for said test subject.
4. (Currently Amended) ~~The method according to claim 2 further comprising the step of~~
A method for accurately measuring hearing loss, comprising the steps of:
selecting a series of audio tones within the normal range of hearing;
measuring a relative sensitivity of a test subject with respect to the ability to hear each of said audio tones, exclusive of the effects of tinnitus;
determining for each tone an intensity necessary for said test subject to hear said tones at a subjectively equal loudness level; and
determining a difference between said intensity measured for each of said tones and an intensity predicted by a standard loudness contour for each of said tones.
5. (Original) The method according to claim 4 further comprising the step of selecting said standard loudness contour to be at least one of a Fletcher-Munson Loudness Contour and a functional equivalent of a Fletcher-Munson Loudness Contour.
6. (Original) The method according to claim 1 further comprising the step of measuring a noise level attributable to tinnitus.

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Appln. No. 10/622,748

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7. (Original) The method according to claim 6 further comprising the step of performing said measuring step at a sound intensity level sufficient to exceed said noise level.
8. (Original) The method according to claim 1 further comprising the step of configuring at least one gain setting of a hearing aid to compensate for said hearing loss determined in said measuring step.
9. (Original) A method for setting a frequency dependent audio gain of a hearing aid device for a person suffering from tinnitus, comprising the steps of:
 - measuring a test subject's loss of hearing attributable exclusively to dispersion in the hearing channel;
 - setting for each of a plurality of frequency bands of said hearing aid device an audio gain level to compensate exclusively for said dispersion loss.
10. (Original) The method according to claim 9 wherein said measuring step is further comprised of:
 - selecting a series of audio tones within the normal range of hearing;
 - measuring a relative sensitivity of said test subject with respect to the ability to hear each of said audio tones, exclusive of the effects tinnitus noise.
11. (Original) The method according to claim 10, further comprising the step of determining for each audio tone an intensity necessary for said test subject to hear said audio tone at a subjectively equal loudness level relative to a remainder of said series.
12. (Original) The method according to claim 11 further comprising the step of selecting said intensity of said subjectively equal loudness level to exceed a level of tinnitus noise.
13. (Currently Amended) ~~The method according to claim 11 further comprising the step of~~ A method for setting a frequency dependent audio gain of a hearing aid device for a person suffering from tinnitus, comprising the steps of:
 - measuring a test subject's loss of hearing attributable exclusively to dispersion in the hearing channel, wherein said measuring a test subject's loss of hearing comprises
 - selecting a series of audio tones within the normal range of hearing and measuring a
 - relative sensitivity of said test subject with respect to the ability to hear each of said audio
 - tones, exclusive of the effects tinnitus noise;

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setting for each of a plurality of frequency bands of said hearing aid device an audio gain level to compensate exclusively for said dispersion loss;

determining for each audio tone an intensity necessary for said test subject to hear said audio tone at a subjectively equal loudness level relative to a remainder of said series;
and

determining a difference between said intensity and a predicted intensity indicated by a standard loudness contour.

14. (Original) The method according to claim 13 further comprising the step of selecting said standard loudness contour to be a Fletcher-Munson Loudness Contour.

15. (Original) A method for providing high fidelity hearing restoration, comprising the steps of:

measuring a test subject's loss of hearing attributable exclusively to dispersion in the hearing channel;

setting for each of a plurality of frequency bands of a hearing aid device an audio gain level to compensate exclusively for said dispersion.

16. (Original) A hearing aid device for a person suffering from tinnitus, comprising:
an audio amplification device having a plurality of audio frequency bands with selectable gain levels, each of said gain levels set for producing a predetermined amount of audio gain set to compensate exclusively for dispersion losses in the hearing channel.

17. (Original) A method for accurately measuring hearing loss, comprising the steps of:
selecting a series of audio frequencies within the normal range of hearing;
measuring a test subject's loss of hearing at each frequency attributable exclusively to dispersion in the hearing channel.

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